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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,813	01/29/2007	Wilda Laux	E3697-00044	1928

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EXAMINER	
MCGARRY, SEAN	
ART UNIT	PAPER NUMBER
1635	
MAIL DATE	DELIVERY MODE
12/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/581,813	LAUX ET AL.	
	Examiner	Art Unit	
	Sean R. McGarry	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *69-101* is/are pending in the application.

4a) Of the above claim(s) *84 and 85* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *69-83 and 86-101* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/13/06;11/14/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of SEQ ID NO: 1, connexin 43 and SEQ ID NO: 12 in the reply filed on 9/10/08 is acknowledged. The traversal is on the ground(s) that the instant invention is drawn to ophthalmic procedures and the prior art cited to destroy any special technical feature linking the inventions does not specifically disclose ophthalmic procedures. It is noted that applicant claims are clearly not limited to ophthalmic procedures, but read broadly on modulation of gap-junction-associated protein expression for wound healing via modulation of connexin expression and other methods that are not limited to ophthalmic applications.

The requirement is still deemed proper and is therefore made FINAL.

Claims 84 85 and sequences other than SEQ ID NOS:1 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/10/08.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 73-78, 80, 81 and 98-101 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-119 of copending Application No. 11/510,280. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds [trauma and surgical incisions, including nervous tissue, for example] and inflammation via the administration of antisense compounds targeting connexin 43 where both applications disclose and claim the use of the same antisense oligonucleotide [SEQ ID NO:1 in both application].

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/510,280, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 73-78, 80, 81 and 98-101 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-189 of copending Application No. 11/510,498. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds [trauma and surgical incisions, including nervous tissue, for example] and inflammation via the administration of antisense compounds targeting

connexin 43 where both applications disclose and claim the use of the same antisense oligonucleotide [SEQ ID NO:1 in both application].

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/510,498, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 69-73, 77-80, and 86-90 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-

44 of copending Application No. 11/512,725. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds including wounds to the eye [trauma and surgical incisions, including nervous tissue are taught in the specification to be wounds, for example] and inflammation via the administration of antisense compounds targeting connexin 31.1. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/512,725, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 69-73, 77-80, and 86-90 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-70 of copending Application No. 11/512,730. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds including wounds to the eye [trauma and surgical incisions, including nervous tissue are taught in the specification to be wounds, for example] and inflammation via the administration of antisense compounds targeting connexin 32. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/512,730, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 69-73, 77-80, and 86-90 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-72 of copending Application No. 11/512,735. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds including wounds to the eye [trauma and surgical incisions, including nervous tissue are taught in the specification to be wounds, for example] and inflammation via the administration of antisense compounds targeting connexin 26. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/512,730, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35

U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 73-78, 80, 81, and 98-101 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-70 of U.S. Patent No. 7,098,190. Although the conflicting claims are not identical, they are not patentably distinct from each other because Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to treating wounds [trauma and surgical incisions, including nervous tissue, for example] and inflammation via the administration of antisense compounds targeting connexin 43 where both applications disclose and claim the use of the same antisense oligonucleotide [SEQ ID NO:1 in both applications].

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The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/512,730, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly

assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 73-78, 80, 81 and 98-101 rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20070060538].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 31.1 for the treatment of various conditions associated with wounds. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-119 as well as the entire specification which describes the claimed invention throughout.

Claims 73-78, 80, 81 and 98-101 rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20080221051].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 31.1 for the treatment of various conditions associated with wounds. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-189 as well as the entire specification which describes the claimed invention throughout.

Claims 69-81 and 98-100 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20080249041].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 31.1 for the treatment of various conditions associated with wounds including eye wounds[connexin 31.1]. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve and the eye. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-44 as well as the entire specification which describes the claimed invention throughout.

Claims 69-81 and 98-100 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20070072819].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 32 for the treatment of various conditions associated with wounds including eye wounds[connexin 32]. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve and the eye. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-44 as well as the entire specification which describes the claimed invention throughout.

Claims 69-81 and 98-100 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20070072820].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 26 for the treatment of various conditions associated with wounds including eye wounds[connexin 26]. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve and the eye. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-44 as well as the entire specification which describes the claimed invention throughout.

Claims 69-81 and 98-100 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 20070072820].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 26 for the treatment of various conditions associated with wounds including eye wounds[connexin 32]. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve and the eye. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-44 as well as the entire specification which describes the claimed invention throughout.

Claims 73-78, 80, 81 and 98-101 rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al [US 7,098,190].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Becker et al have disclosed the use of antisense compound targeted to various connexins including human connexin 43 and 31.1 for the treatment of various conditions associated with wounds. It has been disclosed the inhibition of connexins, including connexin 43 for the treatment of wounds including trauma, surgical incisions, reduction of scar formation and reduction of inflammation. It has disclosed that the tissue can be skin or nervous tissue including spinal chord and optic nerve. Becker et al have specifically disclosed the use of SEQ ID NO: 1 which is the same as the instant SEQ ID NO: 1 which targets a human connexin 43 and would target the instant SEQ ID NO: 12. Becker et al disclose treating for at least 24 hours and further for longer periods. See claims 37-119 as well as the entire specification which describes the claimed invention throughout.

Claims 77,78, 80, 81, and 98 are rejected under 35 U.S.C. 102(b) as being anticipated by Qiu et al [Current Biology Vol.13:1697-1703, 2003].

Qui et al disclose the administration of connexin 43 antisense compounds to treat incision wounds in a mouse model of wound repair.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 81-83 and 86-101 are rejected under 35 U.S.C. 103(a) as being obvious over Becker et al [US7098190], and Becker et al [US 20080221051], and Becker et al [US 20080249041], and Becker et al [US 20070072819], and Becker et al[US 20070072820], and Becker et al [US 20070060538], and Qiu et al [Current Biology Vol.13:1697-1703, 2003].

The applied references all have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

The invention is as clearly set forth in the claims.

All of the references are relied on as set forth in the above rejections.

None of the Becker references specifically teach connexin 43 as a target for treating ocular conditions and the references do not specifically teach the specific ophthalmic treatments. The Becker references above teach treating eye wounds and scarring and inflammation which can be the result of surgery and surgical incisions. Since the references teach treating eye wounds in general and each of the procedures recited in the instant claims requires surgical incision and were all procedures well know in the art at the time of invention it would have been obvious to treat with antisense to connexin since the prior art teaches the benefits in wound healing with administration of connexin targeting antisense compounds where eye wound are specifically recited in the claims of several of the references. Since the prior art teaches the use of inhibiting connexins as a class in the treatment of wound healing and specifically recite the use of several different antisense targeting specific connexins it would have been obvious to inhibit connexin 43 as well with the expectation that similar results would be achieved. Furthermore Qui et al assert that in view of their findings of wound treatment with connexin 43 antisense "This approach is likely to have widespread therapeutic applications in other injured tissues. . ."

The invention as a whole would therefore have been *prima facie* obvious to one in the art at the time the invention was made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean R. McGarry whose telephone number is (571) 272-0761. The examiner can normally be reached on M-Th (6:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Douglas Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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